

**Claims****1. Method for recognizing speech,****comprising the steps of****- receiving (S0) a speech input (SI),****- generating (S1) a set of ordered hypotheses (OH), wherein each hypothesis  
5 contains at least one hypothesis word,****- generating (S2) attribute information (AI) for at least one of said at least  
one hypothesis word, the attribute information being generated to be de-  
scriptive for syntactic and/or semantic information and/or the like of a re-  
spective hypothesis word,****- using (S3) a language model (LM) which is based on said attribute informa-  
tion (AI) to calculate word probabilities for said at least one of said at least  
one hypothesis word, which word probabilities are descriptive for the poste-  
rior probabilities of the respective hypothesis word given a plurality of previ-  
ous hypothesis words,****- using (S4) said word probabilities for generating a set of re-ordered hy-  
potheses (ROH),****- choosing (S5) at least one best hypothesis (BH) from said set of re-ordered  
hypotheses (ROH) as a recognition result (RR),****- outputting (S6) said recognition result.****2. The method according to claim 1,****characterized by****generating said attribute information (AI) for a combination of hypothesis  
words, wherein the attribute information (AI) is descriptive for syntactic  
and/or semantic information and/or the like of the combination of hypothe-  
sis words.****3. The method according to any one of the preceding claims,****characterized in that****said word probabilities are determined using a trainable probability estima-  
tor (TPE), in particular an artificial neural network (ANN).****4. The method according to claim 3,****characterized in that****said artificial neural network (ANN) is a time delay neural network, a recur-  
rent neural network or a multilayer perceptron network.**

5. The method according to claims 3 or 4,  
**characterized by**  
generating a feature vector (FV) that is used as input for said trainable probability estimator (TPE), which feature vector (FV) contains coded attribute  
5 information.
6. The method according to claim 5,  
**characterized by**  
applying a method for dimensionality reduction to the feature vector (FV).  
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7. The method according to claim 6,  
**characterized in that**  
said method for dimensionality reduction is based on principal component  
analysis, latent semantic indexing, and/or random mapping projection  
15 (RMP).
8. The method according to any one of the preceding claims,  
**characterized in that**  
a standard language model is applied additionally to said language model  
20 (LM).
9. Speech processing system,  
which is capable of performing or realizing a method for recognizing speech  
according to any one of the preceding claims 1 to 8 and/or the steps thereof.  
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10. Computer program product,  
comprising computer program means adapted to perform and/or to realize  
the method of recognizing speech according to any one of the claims 1 to 8  
and/or the steps thereof, when it is executed on a computer, a digital signal  
30 processing means, and/or the like.
11. Computer readable storage medium,  
comprising a computer program product according to claim 10.  
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